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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,212	09/09/2003	Michael A. Kotson	10019910-1	5687

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EXAMINER
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DINH, TUAN T

ART UNIT	PAPER NUMBER
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2841

DATE MAILED: 12/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/659,212	<b>Applicant(s)</b> KOTSON ET AL.	
	<b>Examiner</b> Tuan T. Dinh	<b>Art Unit</b> 2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 September 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18 and 19 is/are allowed.
- 6) ☒ Claim(s) 11-17, 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### Note of claimed language:

Examiner is considered the term "configured to" as well defined as an intended use limitation. The claim limitation that employ the phrase of the type "configured to" is typical of claim limitation which may not distinguish over prior art according to the principle. It has been held that the recitation that an element is "configured to" perform or is "capable of being" performing a function is not a positive limitation but only requires the ability to so perform, see In re Venezia, 189 USPQ (CCPA 1976).

Further, the term "for plus function is not a positive limitation".

### Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11-17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter et al. (U.S. Patent 5,905,885) in view of Hall, Jr. et al. (U.S. Patent 6,346,842).

As to claims 11, 20, Richter et al. discloses a configurable board (101) as shown in figures 1A-1C, comprising:

a substrate (a body of the board 101); a plurality electrical device receivers (114, 115, 118, 119) on said substrate,

at least some receivers having reception interfaces (trace or circuitries form on/in the board 101) with said receivers;

a plurality of controllers (104, 146) on substrate, and

an electrically conductive interconnection network (jumper wires 110, 112, 113) on said substrate interconnecting said controllers (104, 146) with said receivers (114, 115, 118, 119).

The first wire (110) electrical connected the controller (104, 146) to said receivers (114, 115), and the other wires (112, 113) electrical connected the controllers (104, 146) to the other receivers (118, 119).

Richter et al. does not specific disclose that said network (the jumper) comprising sets of zero ohm resistor terminals that enable for the interconnection between the controllers and the receivers.

Hall, Jr. et al. teaches a variable delay path circuit as shown in figures 1-2 comprising a network comprising zero ohm resistors (17, 18) that being connected between a driver (1) and a receiver (2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a teaching of Hall employed in the circuit board of Richter et al. in order to optimize operation at varying frequencies and reduce cost for circuit board manufacturing.

As to claims 12-14, Hall shows the terminals (9, 10) at least some sets separated by open circuits, see figure 1B.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a teaching of Hall employed in the circuit board of Richter et al. in order to control the operation of the varying frequencies applied on the circuit board.

As to claims 15-17, Richter and Hall do not specific discloses the receivers comprising respective arrays of pin receptacles.

However, the components mounted on the circuit board of Richter would be well known comprising pins or leads or terminals connected on the circuit board for electrical signal communications therebetween.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a receiver having pins as taught by Richter and Hall in order to provide signals for communication.

***Allowable Subject Matter***

3. Claims 18-19 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art fails to disclose or render obvious in combination of the circuit board having at least some of sets of zero ohm resistor terminals are connected between different receivers (claim 18), and at least some of sets of zero ohm resistor terminals are connected between respective controllers and respective receivers (claim 19).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Arguments***

4. Applicant's arguments with respect to claims 11-20 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues:

Richter does not disclose "any of electrical device receivers" and "the receiver being capable of receiving different types of electrical devices or having reception interfaces".

Examiner disagrees because the term "electrical device receiver", which is a device to receive data, information, other devices, or any sources. Richter discloses for example, "a disk drive 114 or 115", which is a device to receive data and drive data to other component need to use. So the element 114 or 115 is a receiver device, and further the devices (118, 119) are different with the other (114, 115) and all are capable of receiving different types of devices or having reception interfaces (134, 135), see figure 1A.

Therefore, examiner believes the Office action is proper to reject over Richter in view of Hall.

Richter does not disclose "controller". Examiner disagrees because in a Background of the Invention of Richter and in figure 1A that shows the elements (104, 146) including control components, so the elements (104, 146) meet the claim.

Thus, the Office action is proper.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 11-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Dinh whose telephone number is 571-272-1929. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reichard Dean can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Tuan Dinh', with a long, sweeping horizontal line extending to the right.

Tuan Dinh  
December 05, 2006.